PTSAC

Sub-committee Recommendation Form

Date: July 1, 2010

Subcommittee: Speed Humps

Subcommittee Chairperson/s: John Britton

Other Participants and Technical Advisors: Steve Friedman, Alan Migdall

Subcommittee Charge: (Describe what subcommittee was asked to do)

Review the pros and cons of the use of speed humps as a traffic-calming and residential traffic management mechanism.

Recommendations: (What the subcommittee recommends to the PTSAC and/or for submission to the County Executive and the County Council)

Recommend the continued placement and use of speed humps in residential neighborhoods under the current notice and neighborhood involvement procedures.

Justification and Explanation:

Speed Humps are an engineering method (geometric pavement design) to slow traffic on residential streets – relatively inexpensive and effective in reducing vehicle speeds. Speed humps are designed for residential roadways of two lanes or less at a posted speed limit of 30 mph or less (with 85^{th} percentile speeds of 31-34 mph). Industry analysts consider roadways with volumes of 600 - 5,000 vehicles per day as good candidates for speed humps.

The benefits of the use of speed humps include: slowing traffic, reducing accidents and serious injuries or death, reducing cutthrough use of residential streets, self-enforcing, enhancing pedestrian safety goals particularly in areas near schools, day care facilities and recreation areas, and low cost/minimum installation disruption.

The negative factors associated with speed humps include: increased emergency response times, increased noise level at each placement, increased air pollution, hindrance to street maintenance and snow removal, diversion of traffic to other parallel and adjacent residential streets, liability (if improperly installed), aesthetics and risks to other road users such as bicyclists, particularly during the installation phase and in periods when roads may be affected by rain, snow, ice and leaves and other debris.

Main opponents of the use of speed humps are the emergency situation responders -- fire and rescue workers. The Montgomery County Fire and Rescue Commission conducted a study of the effect on emergency vehicle response times of the use of speed humps that resulted in a finding that speed humps cause delays generally of between 2.8 and 7.3 seconds per hump. This delay affects rescue vehicles en route to incidents and those taking a priority patient to a hospital or other treatment facility. In addition, speed humps may cause discomfort to these priority patients. The Commission's conclusion is that speed humps "cause considerable delays for responding fire-rescue apparatus, which may adversely impact the outcome of certain life-threatening incidents, such as those involving cardiac arrest, uncontrolled bleeding or persons trapped in burning buildings or vehicles."

The list of benefits and negative factors summarizes comments from the Fire and Recue Commission members of the Montgomery County chapter of the Maryland Municipal League and the findings of general research. Regardless of Montgomery County's policy, the incorporated jurisdictions may set their own policies with regard to traffic calming, including the use of speed humps. The Subcommittee also recommends that the County conduct research on the use of "speed lumps" as an alternative — which are two or more raised and rounded areas placed laterally across a roadway with precisely spaced gaps and can be designed to minimize delay for emergency vehicles and mitigate the risks to bicyclists. Mitigation for bicyclists (*e.g.*, cut through passage) with respect to speed humps also may be an issue for further study.